Revisions to the Application

A substitute specification has been prepared in order to adapt the application to US practice, correct inadvertent informalities, and improve the idiomatic English. The substitute specification (which includes the title and abstract, but not the claims) appears in Attachment A to this Amendment. Attachment A also includes a marked-up copy of the original specification, showing the changes that have been included in the substitute specification.

Among other improvements, the substitute specification condenses the abstract into a single paragraph and provides a new title, as required on page 2 of the Office Action. It also inserts an antecedent basis in the specification for the wrong for translate, such the " narcotic sprayer " to replace the " narcotic guns " in claim 7 and the remote control plane of claim 9 (for the narcotic guns, see page 12 of the substitute specification, line 2, and for the remote control plane, see page 15 of the substitute specification, lines 16-19). Additionally, the substitute specification refers to elements by their reference characters rather than by a combination of the figure number and reference character -- a defect noted on page 3 of the Office Action.

At the bottom of page 2, the Office Action comments that the phrase "flight locus calibrator" is vague and would not be understood by one skilled in the art. It is noted that the term "locus" here is used in a somewhat mathematical sense or "trajectory" somewhat astronomg sense, meaning the position of points along a path, and perhaps "flight path " would have been a better translation. In the substitute specification, the flight locus calibrator change from Flight Trajectory Calibrator is also called a " flight path specifying unit " as an aid to those who might have occasion to casually review this document (such as patent searchers) in the future. This does not represent new matter since an ordinarily skilled person who had read the application would have recognized that a flight path specifying unit was what the inventor had in mind, particularly in view of the teaching that the "flight locus calibrator" can be used to lock flight course under the remote control of a "ground-based monitoring center" (see the sentence at page 13 of the application as-filed, lines 15-17).

In the paragraph bridging pages 3 and 4, the Office Action inquires why the weight sensor, voice recognition system, and so forth are not provided in the space covered by the double-door. The applicant does not understand, the original specification of the claim 4

shows: "...wherein said 'single person checkroom', which has a preset program and closed space,..." and claim 6 further shows: "...wherein said the identification of a single person in the 'single person checkroom' is confined to the raster curtain.", "...closed space,..." which means that all tests except for password card (Fig.1e) are conducted in the raster curtain in the closed space of the door, or " provided in the space covered by the double-door.

Near the top of page 4, the Office Action inquires what a "raster curtain" is, and suggests that this is a translation problem. However, it is respectfully submitted that an ordinarily skilled person who had read the application (particularly the passage at page 14 of the application as-filed, lines 3-10 and Figures 3 and 4) would have realized that the raster curtain detector c shown in Figure 4 of the application's drawings cooperates with beams emitted from the launcher k in Figure 4 in order to ascertain whether a person who is being tested has unexpectedly broken beams of the curtain or is carrying something that has broken the beams.

As an aid to those who have occasion to casually review this document in the future, the substitute specification has been revised to assert that the beams emitted by the launcher k are provided "for the raster curtain" (see page12 of the substitute specification, lines 24-26). It is respectfully submitted that this is not new matter since, as was indicated above, an ordinarily skilled person would have appreciated that the purpose of the raster curtain is to determine whether a person who is undergoing identification testing has reached out of the testing area in an unexpected manner, or is carrying an object that extends out of the testing area. It should be noted that, in Figure 3 of the application's drawings, the beam launcher k is associated with the raster curtain detector c in the block at the upper right-hand corner of the drawing.

Pursuant to 37 CFR §1.125, the undersigned attorney states that he believes that the attached substitute specification contains no new matter, and that an ordinarily skilled person would have realized that the above-noted revisions merely clarify what the inventor had in mind. The Examiner is urged to review the marked-up copy to confirm for himself that new matter has not been added.

At the lines 6 of page 4, the Office Action inquires how does the remote-control plane is prepared to control the airliner?

In this question, it's simple and again abstruse. Just like the remote-control model plane popular among young men about ten or two decades ago, the remote-control plane is a simple and matured flying vehicle remote-control technique but with rather high precision. For example, the ratio of oil injection of the right turbine to the left turbine can be remotely controlled to change the flying direction of the plane rightward or leftward, and angles of the movable spoilers, ailerons, and flaps on the wings can be changed through remote control to decide the flying angle of the plane. Both the oil injection and the angles of the movable spoilers, ailerons, and flaps are controlled through the so-called "magnetic flow valve". In a simplest example of application of the flow valve, it is as simple as a digital gasoline pump at a gas station. A flow feedback record of the flow valve can be used in automatic homing setting procedures.

The present Amendment also revises the claims to adapt them to US practice and to delete unnecessary limitations.

It is respectfully submitted that the claims, in their amended form, are now suitably definite under US practice and thus overcome the rejection under 35 USC 112, paragraph 2.

The present Amendment also includes, in an Attachment C, a request for approval of drawing changes.

The Rejection under the First Paragraph of 35 USC 112:

The rejection of the claims for lack of enablement is respectfully traversed. Although an ordinarily skilled person who had read the application as-filed might have been taken aback, momentarily, by terms such as "flight locus calculator" and "raster curtain," and might also have wondered why some of the Figures show the detectors and so forth for identity tests beside the "single person checkroom," a thorough study of the application as a whole (including the drawings and the claims) would have dispelled any confusion about these matters. It is not for the ordinarily skilled person that the changes discussed above were included in the substitute specification, but for casual readers (such as future patent searchers) who lack ordinary skill in the art and who will probably appreciate the added clarifications.

But the added clarifications would not have been needed, by an ordinarily skilled person, in order for him or her to make and use the invention without undue experimentation.

Moreover, the disclosure of a patent application only needs to be enabling, under the first paragraph of 35 USC 112, with respect to what is claimed. Since claim 1 is now directed only to the use of a double-door "single person checkroom," the application as-filed is clearly enabling with respect to claim 1.

Information Disclosure Statement:

At the top of page 3, the Office Action comments that a listing of references in the specification does not constitute a proper Information Disclosure Statement. However, a proper Information Disclosure Statement, with a form 1449 and copies of the references, was filed on March 5, 2002. If it has been inadvertently misplaced, it is respectfully requested that the undersigned attorney be telephoned, at the number listed below, so that an extra copy can be forwarded to the Examiner.

The Rejection for Obviousness:

The Office Action rejects claim 1 (*inter alia*) for obviousness on the basis of Garehime in view of Zekich, Feher, and Borthayre. The Office Action acknowledges that Garehime lacks a double-door system with means to determine the accessibility of a person to the cockpit, but notes that Zekich discloses a double door system. Zekich's system is used for a security area, but not specifically on an airplane. More importantly, Zekich's system uses revolving doors. While it is true that, at one position of a revolving door, a person would be confined between two segments of the door, it is likewise true that the weight and space required for a revolving door would clearly be an appropriate for use on an airliner. Furthermore, there is nothing in Zekich's use of revolving doors that would have suggested,

to an ordinarily skilled person, the use of a double-door "single person checkroom" which includes (in the words of claim 1) "...first and second doors that are to be connected open and closed positions of one another.` and (in the words of claim 2) " ...the first and second doors are opened and closed according to the preset program." , and Fig.3 shows the double-door of the On/Off program. (page 12 c-e of the substitute specification,) But, the segments of a revolving door, in contrast, move in unison of a mini cycle.

The Office Action comments that Borthayre discloses means for monitoring an airliner from the ground and that Feher discloses a system to take control away from the cockpit. Neither of these references, though, supply what is lacking an Garehime, or suggest the use of first and second to be connected movable doors in order to form a "single person checkroom" on the way to the cockpit of an airliner.

Since the remaining claims the band from claim 1a and recite additional limitations to further defined the invention, it is respectfully submitted that they are patentable along with claim 1 and need not be further discussed.

The inventor also responds to the examiner's rejections to the claims as follows:

A. About the rejection to claims 1-8 under 35 U.S.C. 103(a) as being unpatentable over Garehime in view of Zekick, Feher, and Borthayre:

1. Garehime (US Pat. No. 4,644,854) discloses a bullet-firing weapon having an electronic image sensor incorporated therewith, while the present invention discloses a narcotic gun that is actually an ejector. A bullet-firing weapon is not legally allowed for installing on a passenger plane. The American government has not yet legislated to permit installation of security means, such as bullet-firing weapons, on passenger planes, at least at the time the patent application for the

invention of Zhen-Man Lin is filed. In view that the "monitoring device" is not a patented invention made by Garehime, it is not appropriate to reject the patentability of Zhen-Man Lin's invention based on the Garehime's invention and teaches of Zekich and Feher.

2. Zekich (US Pat. No. 4,586,441) discloses a revolving door system installed with bulletproof glass, while Zhen-Man Lin discloses a "unidirectionally" transparent bulletproof glass door that allows only the pilot to see the passage from one direction of the door and makes the hijackers conscious of someone is looking at them. This is an important military concept and has increased deterrent force against the hijackers.

Moreover, the system taught by Zekich lacks the detector of human body infrared and the detector of image test.

The "hand geometry reader" disclosed in Zekich's invention is exactly the hand geometry reading and measuring means disclosed in US Pat. No. 3,648,240 granted to Jacoby et al. On the other hand, the "five-finger mold test" disclosed in Zhen-Man Lin's invention employs image scan technique to supply data to a computer for splitting and comparing through computerized procedures. Lin's "five-finger mold test" is completely different from Zikich's hand geometry reader in terms of checking manner, and the two measures are products of different times.

In the double-door system disclosed by Zhen-Man Lin, all the tests are conducted within the zone defined by the raster curtain. Without doing so, all the tests are subject to errors and fail to successfully deal with a terrorist like Ben la den. The double-door system taught by Lin is an absolutely important and novel invention.

Moreover, a double-door and a revolving door are different in terms of their physical spatial dimensions. It is obvious the double-door is more suitable for use on a passenger plane due to its reduced volume as compared with the revolving door. An important nature of patent in the scope of intellectual properties involves the novelty and originality of an invention. It is improper to deny the originality of an invention (Lin's double-door) just because the existence of another early structure (the revolving door).

3. Feher (US Pat. No. 4,816,828) discloses an aircraft damage assessment and surveillance system. If the electronic image sensor disclosed in Garehime's patented invention (US Pat. No. 4,644,845) could completely replace Feher's invention, why is Feher's granted a patent two years later after Garehime has obtained the patent?

Feher discloses a surveillance system that is not designed to prevent a hijack, while Zhen-Man Lin discloses a systematic solution program for preventing airliner hijack. In Lin's airliner hijacking prevention system, narcotic ejector guns

are installed above the cross-shaped passages of the four entrances of the plane (see number "3" in Fig. 1) and could be actuated from either the ground monitoring center or the cockpit.

The zones on the plane available by the hijackers are therefore largely restricted. The surveillance system disclosed by Feher does not include an independent and concealed power supply system and tends to be shut down by the hijackers and becomes completely useless.

On the other hand, Lin's invention emphasizes the use of an independent and concealed power supply system for monitoring and communication systems on the plane. Feher does not suggest the use of satellite relay stations and standby remote-control plane in his surveillance system, while Lin does.

In brief, Feher's surveillance system and Lin's airliner hijacking prevention system are completely different in the fields to which they are to be applied. It is obvious Feher's invention can not replace Lin's invention at all in terms of their application fields.

4. Zhen-Man Lin's invention is actually an improvement on Borthayre's design (FR Pat. No. 2584842). The expression of "on the crew or the passengers which, by virtue of their combination and their interrelations" in the Abstract of Borthayre's invention clearly verifies the system taught by Borthayre includes automatic homing device that can be actuated only through the cooperation of the crew and the passengers. It is obviously questionable by whom the automatic homing device is actuated in the event the crews are under control of the hijackers and the passengers are not trained at all. And, what if the pilot(s) should be a terrorist? Lin's invention obviously solves this problem by having the power of remote-controlled homing or steering to be controlled by the ground monitoring center.

In Borthayre's invention, there is not provided the independent and concealed power supply system. The ordinary power supply systems on the plane tends to be shut down by the hijackers and become completely useless. However, Lin's invention emphasizes the use of an independent and concealed power supply system for monitoring and communication systems on the plane.

Borthayre's invention does not disclose the use of satellite relay stations and standby remote-control plane in his monitoring system. What if the plane in trouble should be a location far away from the ground control center, or what if the signal of homing should be affected by geographical or weather conditions? For the sake of the crews' safety, Lin's invention has stressed the solution in this aspect.

Borthayre's invention does not include the flight trajectory (or orbit) calibrator disclosed in Lin's invention. The flight trajectory calibrator disclosed in Lin's invention enables a real-time report to the ground monitoring center about any tendency of the plane to deviate the normal flight course.

B. About the rejection to claims 9 under 35 U.S.C. 103(a) as being unpatentable over Garehime as modified by Zekick, Feher, and Borthayre as applied to claim 1 above, and further in view of Torian et al.:

Torian et al. (US Pat. No. 3,856,237) discloses a radar guidance system for vehicles. This system is indeed a necessary means for the remote control of a passenger plane 28 years ago when the satellite locating technique has not been widely employed, and it is still a necessary search and guidance radar system in existing ground monitoring centers. The radar guidance system disclosed by Torian et al. is a standard facility for the satellite relay and locating systems and the existing ground monitoring centers. Although the radar guidance system disclosed by Torian et al. equipped at the ground monitoring centers supports both the autopilot and the remote-controlled pilot of a hijacked plane, it does not necessarily mean Torian et al has the right to share or take exclusive possession of the patent right for automatic homing and/or remote-controlled homing. Therefore, it is not appropriate for the examiner to request that Lin's invention also technically covers claims for the radar guidance system or even the satellite relay and locating system.

Just as the bullet-firing weapon disclosed by Garehime that is not permitted for installing and use on a passenger plane, the inventions of Torian et al and of Zhen-Man Lin actually belong to two different fields. It is unreasonable to reject Lin's invention in view of Torian et al.

Nevertheless, it is doubtless the radar guidance system disclosed by Torian et al is an indispensable means for supporting and assisting independent remote control of flight, particularly when pilotless planes are needed by the United States in attacking Afghan, in which the planes are not remotely controlled to fly within fixed flight courses.

For most navigation courses for civilian aircrafts, there are provided not only complete ground and airfield locating systems, but also satellite locating systems. Meanwhile, there are receivers on the plane ready for displaying at any time the current altitude, longitude, and latitude of the plane. In consideration of these true conditions, the examiner would not say "as taught by Torian et al to remote control the aircraft."

The automatic homing technique for civilian aircrafts is extremely simple and matured. Once a civilian aircraft has been successfully located when it is approaching to the airport, it can be set to the automatic landing procedures. Key points of automatic landing procedures include calculation of the plane's flying altitude, flight speed, and a distance between the plane and the airport, the influence of ambient wind speed, etc. A device referred to as the electromagnetic oil flow control valve is directed to control the oil injection of the jet engines at two sides of the plane to decide the leftward and rightward flight direction and flight speed. Another device also referred to as the electromagnetic oil flow control valve is directed to change the positions of oil-pressure rods on two wings of the plane, in order to change the floatability of wings against air to match with the landing procedures. Since the full set of automatic landing procedures has long been stored on the plane and is ready for use at any time, the remote-controlled homing referred in Lin's invention has already been largely simplified, so that the plane is not remotely controlled all the way but is remotely controlled only to the time when it

reaches at a homing procedure spot set on the flight path. Thereafter, the plane is set to automatic homing or automatic landing procedures. Therefore, it is not necessary to be taught by Torian et al. However, even if it were necessary to use the system taught by Torian et al, the patentability of Lin's invention is not in any way affected by the patent right granted to Torian et al., because the two inventions belong to two different application fields.

One important thing is the existence of the fact that the electronic image sensor disclosed by Garehime does not hinder the imaging apparatus disclosed by Feher for use on the plane is obviously because there are precedents of co-existing rights in different fields. The inventor sincerely hopes the examiner could get rid of the idea that the 28-year old invention by Torian et al has influence on the patentability of Lin's invention.

C. **The inventor about the Ord, Anderson, Pizzo, and Jensen disclose hijacking prevention means. (see the Office Action inquire pages 7,** lines 3 **)**

1. **Ord.** (US Pat. No. 3,704,845) responded page 6 of the application as-filed.

2. **Anderson,** (US Pat. No. 3658277) the invention of Anderson is a mechanical rotating space allowing only one person, which was designed 30 years ago, without the conception of a separate buffer space. The invention of Anderson cannot prevent hijackers from entering the cabin together with crew because it does not fix any automatic check device in the rotating space.

3. **Pizzo.** (US Pat. No. 3,811,643) a separate space is set at the back of the cabin, and a trap is installed catch the hijackers.

This patent is 28 years old. The above independent space and trap is not controlled automatically. It is not important to catch the hijackers alive and it is against the law to let free the hijackers without permission. Only a single foolish hijacker can be caught alive!

The request of Pizzo is totally different from that of Zhen-Man Lin, and thus has nothing to be drawn upon. It is unfair to say that the patent of Zhen-Man Lin has drawn upon the insights of Pizzo. Therefore, Patent 3,811,643 will not affect the acknowledgement of Lin's patent.

4. **Jensen** (US Pat. No. 3,841,328) the "Airplane Hijacking Injector" is totally different from Lin's patent. The injector hides under the seat. That is impracticable. The hijackers generally stand in their action. If the hijackers force the crew to manipulate the remote controller, the passengers will actually (although unwillingly) help the hijackers!

The anesthetic in Lin's patent is sprayed out, while that in patent 3,841,328 is injected. Therefore, Lin's patent is not affected by the latter.

In patent us-3,841,328 of Jensen, the seat is used dynamically and

irregularly. It is unpredictable when the **injector will lose control and inject toward** passengers. It is unknown whether the airlines are willing to take the risk to use it and whether the hijackers are willing to sit on the seat. It is unlikely that the huge system of Lin's patent draws upon the patent of Jensen.

D. **The inventor about the Jacoby et al, Diaz, Anastassakis, and Brown disclose security systems. (see the Office Action inquire pages 7, lines 4)**

1. **Jacoby et al, (** US Pat. No. 3,648,240) The patent measures the dimensions of a human hand and compares them with previous ones. It is superior to the advanced optoelectronic coupling measurement of distance 30 years ago. It is wide different from the finger and palm print obtained in the patent of Zhen-Man Lin by using picture scanning and comparing and checking it through computer program. It is the difference of a whole generation in terms of both accuracy and workmanship. A huge and complete system allows a separate patent, but pitifully, the patent of Zhen-Man Lin does not draw upon the patent of us- 3,648,240, therefore, Dear Examiner should not consider it.

2. **Diaz, (** US Pat. No. 6,308,644) the invention is a 4-door "2-room space" with limited check means, totally different from the invention of Zhen-Man Lin both in terms of uses and in terms of check means. Therefore, Lin's invention will not be affected.

3. **Anastassakis,(** US Pat. No.3,750,158) patent, takes weight as the parameter to compare the difference resulting from the preset value. If the difference exceeds the predetermined range, an alarm will occur or another region will be controlled. The patent mainly involves "the comparative unit of digital weight", which is "IC" component available everywhere. Does that mean that we can use the patent of 3,750,158 if the unit is available?

   Therefore, the patent of 3,750,158 does not affect the patent of Zhen-Man Lin, which uses digitized weight as another check means. The key of Zhen-Man Lin's patent is "system", and it is allowed to involve related patent in a huge anti-hijacking system.

4. **Brown, (** US Pat. No. 3,697,972) The metal detection alarm system does not relate to Zhen-man Lin's application for patent, because passengers must pass the check of the security system of the airport before going on board. The metal detection alarm system is the standard configuration of the security system of the airport, therefore no defense is necessary for that system.

The following is a summary of the originated hijacking-preventing system invented by Zhen-Man Lin:

1. Special beams of raster curtain for test;
2. Narcotic ejector gun;

3. Infrared image test;
4. Image test;
5. Voice recognition; and
6. Flight trajectory (or orbit) calibrator.

And, the following is a summary of the improvements made by Zhen-Man Lin on hijacking-prevention systems:

1. "Unidirectional" bullet-proof glass door;
2. Independent and concealed electronic monitoring device and power supply system thereof;
3. Five-finger mold hand image reader test; and
4. Remote-controlled automatic/semiautomatic steering.

Conclusion

For the foregoing reasons, it is respectfully submitted that the application is now in condition for allowance. Reconsideration of the application is therefore respectfully requested.

Respectfully submitted,

November 12 , 2002
Date

Amendment by Applicant

Lin ZHEN-MAN
HKID D188015(3)
Telephone: 852-2344 0137
Telefax: 852-2341 9016
Email : lzm@ycec.com
Email : hcec@szonline.net

Amendment by Applicant

MARKED-UP -- PROPOSED DRAWING CHANGES

Approval of the proposed drawing changes marked in red on the following copies of Figures x-y and prolong the dotted line of Fig.4 f are respectfully requested.

Fig. 1

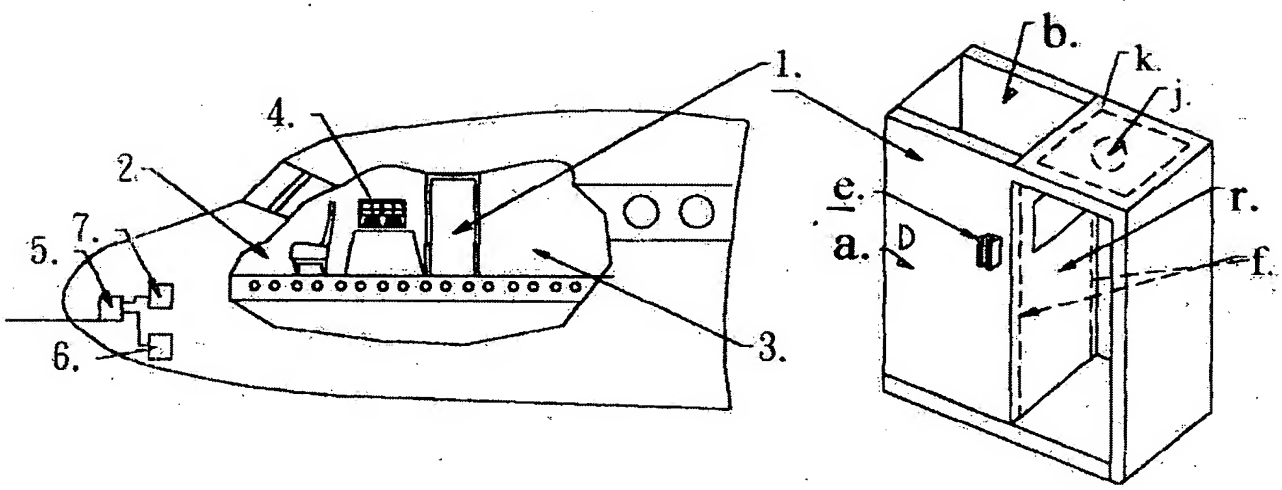


Fig. 2

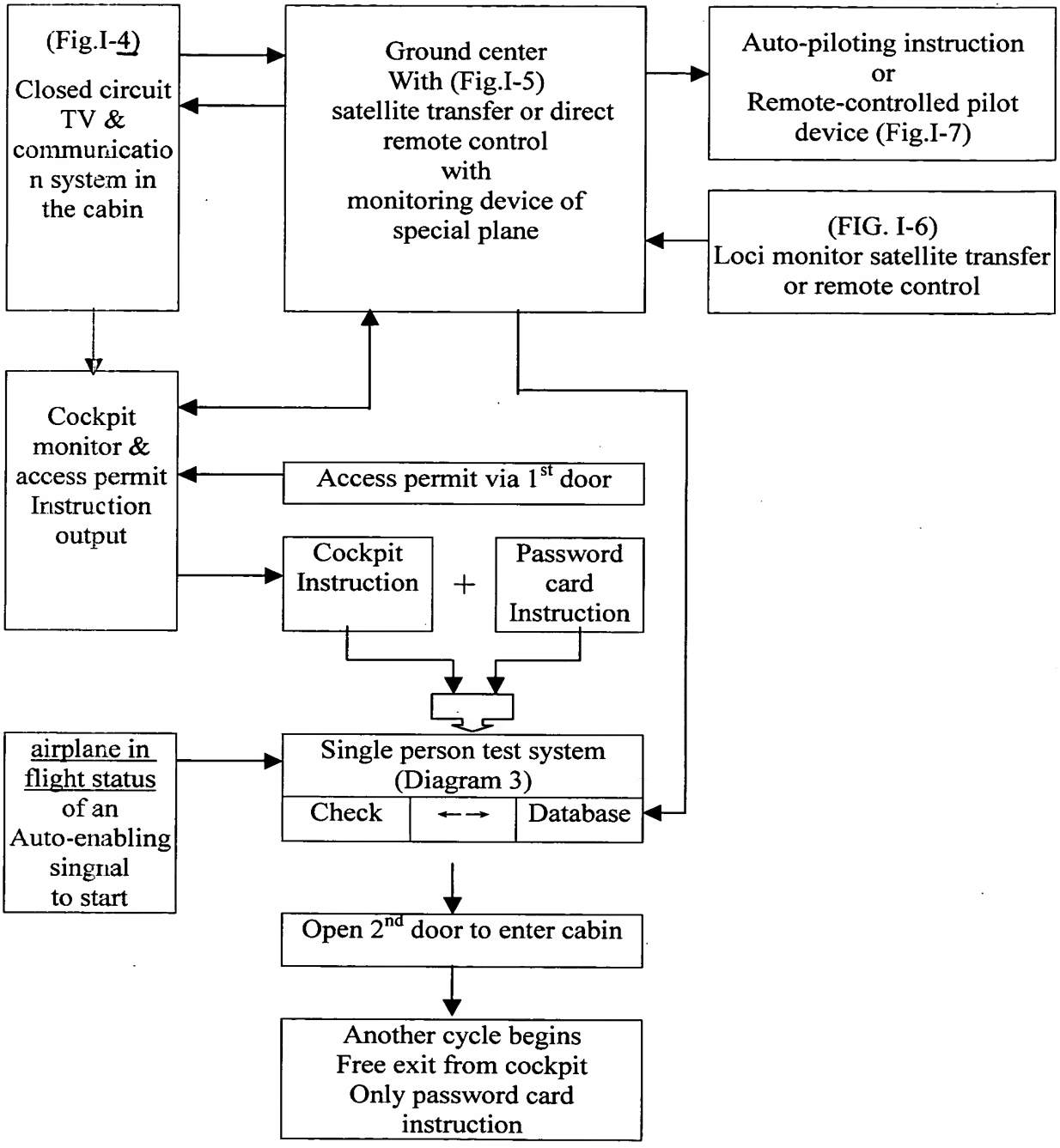

(Fig.I-4)
Closed circuit TV & communicatio n system in the cabin
Ground center With (Fig.I-5) satellite transfer or direct remote control with monitoring device of special plane
Auto-piloting instruction or Remote-controlled pilot device (Fig.I-7)
(FIG. I-6)
Loci monitor satellite transfer or remote control
Cockpit monitor & access permit Instruction output
Access permit via 1st door
Cockpit Instruction
+
Password card Instruction
airplane in flight status of an Auto-enabling singnal to start
Single person test system (Diagram 3)
Check
Database
Open 2nd door to enter cabin
Another cycle begins
Free exit from cockpit
Only password card instruction

Fig. 3

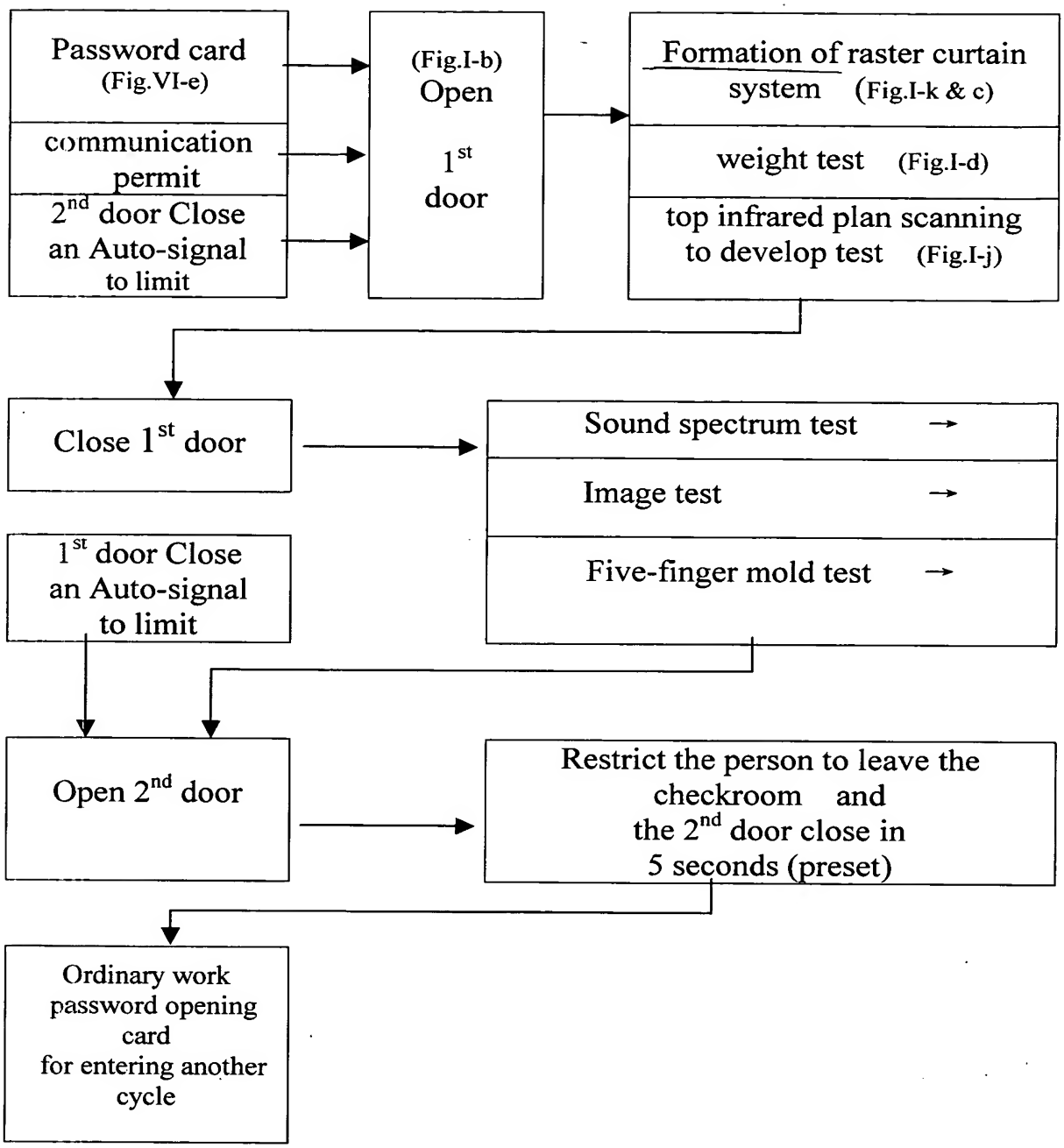
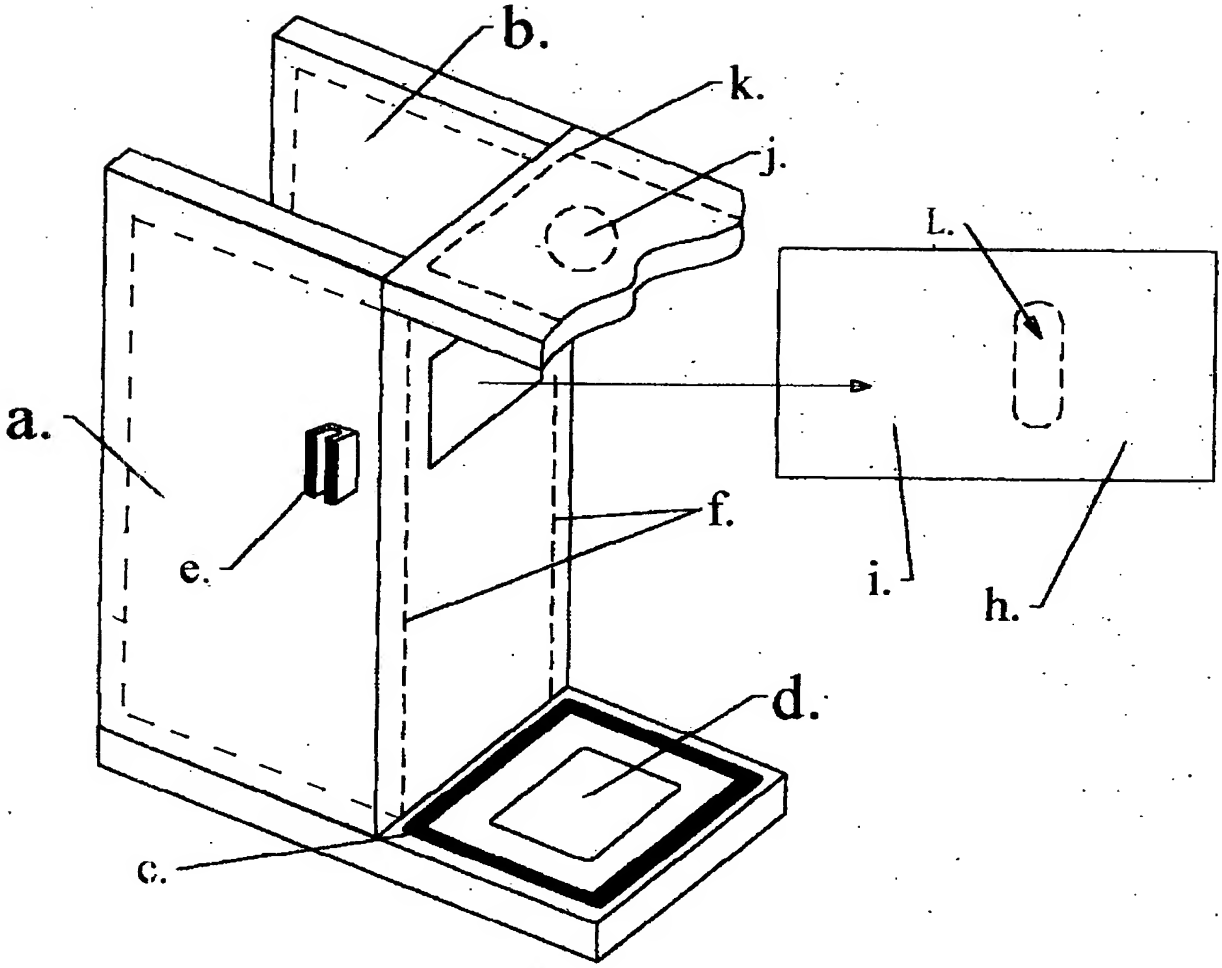

Password card (Fig.VI-e)
communication permit
2nd door Close an Auto-signal to limit
(Fig.I-b) Open 1st door
Formation of raster curtain system (Fig.I-k & c)
weight test (Fig.I-d)
top infrared plan scanning to develop test (Fig.I-j)
Close 1st door
1st door Close an Auto-signal to limit
Sound spectrum test →
Image test →
Five-finger mold test →
Open 2nd door
Restrict the person to leave the checkroom and the 2nd door close in 5 seconds (preset)
Ordinary work password opening card for entering another cycle

Fig. 4



ATTACHMENT B -- CLAIM CHANGES

1. An airliner hijacking prevention system consists of the following:
   a. A double-door "single person checkroom" is that providing a closed check space, allowing only a single qualified person to access the cockpit and including first and second doors that are to be connected open and closed positions of one another.
   b. The cockpit and the ground monitoring center continuously monitor the cabin through at least one concealed electronic monitoring devices.
   c. Flight trajectory monitoring is provided by "Flight Trajectory Calibrator" and the ground-based monitoring center may switch manual steering over to remote-controlled automatic/semiautomatic steering when the engineer on the airliner loses his right to act.
2. An airliner hijacking prevention system as claimed in claim 1, wherein said "single person checkroom" is the only entrance to the cockpit, and the first and second doors are opened and closed according to a preset program .
3. An airliner hijacking prevention system as claimed in claim 1, wherein said the double door, that is, the first and second doors of the "single person checkroom" are equipped with unidirectionally transparent bulletproof glass, shockproof plastic, or a naked eye viewing window.
4. An airliner hijacking prevention system as claimed in claim 1, further comprising detector means for conducting at least one of a weight, image, voice, fingerprint or ID number test on a person in the "single person checkroom" to determine right of passage.
5. An airliner hijacking prevention system as claimed in claim 4, wherein the detector means for fingerprint identification comprises a "five finger mold " which helps the "single person checkroom" make identification .

6. An airliner hijacking prevention system as claimed in claim 4, further comprising means for generating can to set the different frequency's beams of a raster curtain around the person in the "single person checkroom" and detector means for detecting whether the raster curtain has been breached .

7. An airliner hijacking prevention system as claimed in claim 1, further comprising narcotic sprayer installed at a passage of the aircraft, the narcotic sprayer being responsive to the at least one monitoring device.

8. An airliner hijacking prevention system as claimed in claim 1, wherein the airliner additionally has a cabin, wherein messages between the airliner and the ground-based monitoring center are transferred through a relay satellite or special frequency band, and further comprising a concealed electronic monitoring device for permitting the ground-based monitoring center to monitor the cabin and passenger cabin.

9. An airliner hijacking prevention system as claimed in claim 1, further comprising a remote-control plane for use when the ground-based monitoring center is unable to control the airliner normally due to poor communications, in which case the remote-control plane takes off and controls the airliner.

MARKED-UP -- CLAIM CHANGES

This attachment includes claims that are being rewritten in the present amendment, with brackets being used to identify deletions from the previous version of the rewritten claims and with underlining being used to identify additions to the previous version.

1. (Amended) [Airliner] An airliner hijacking prevention system [solution program] consists of the following:

   a. [The] A double-door "single person checkroom" is that provides [the only entrance to the cockpit ;] a closed check space, allowing only a single qualified person to access the cockpit and including first and second doors that are to be connected open and closed positions of one another.

   b. The cockpit and the ground monitoring center continuously monitor the cabin through at least one [the] concealed electronic monitoring devices. [forming a deterrent to potential hijackers;]

   c. [With the] Flight [locus monitor,] trajectory monitoring is provided by " Flight Trajectory Calibrator" and the ground-based monitoring center may switch manual steering over to remote-controlled automatic/semiautomatic steering when the engineer on the airliner loses his right to act.

2. (Amended) [Airliner] An airliner hijacking prevention system [solution program] as claimed in claim 1, wherein said "[Single] single person checkroom" is the only entrance to the cockpit, and the [two] first and second doors are opened and closed according to [the] a preset program .

3. (Amended) [Airliner] An airliner hijacking prevention system [solution program] as claimed in claim 1, wherein said the double door, that is, the [front] first and [back] second doors of the "single person checkroom" are equipped with unidirectionally transparent bulletproof glass, shockproof plastic, or a naked eye viewing window.

4. (Amended) [Airliner] An airliner hijacking prevention system [solution program] as claimed in claim 1, [wherein said "single person checkroom", which with preset program and closed space, one or more identification means such as] further comprising detector means for conducting at least one of a weight, image, voice, fingerprint or ID number [can be used to the] test on a person in the "single person checkroom" to determine [of] right of passage.

5. (Amended) [Airliner] An airliner hijacking prevention system [solution program] as claimed in claim 4, wherein [said] the detector means for fingerprint identification [mean, that is,] comprises a "five finger mold "[,] which helps the "single person checkroom" make identification. [almost unmistakably].

6. (Amended) [Airliner] An airliner hijacking prevention system [solution program] as claimed in claim 4, [wherein said the identification of a single person in the "single person checkroom" is confined to the] further comprising means for generating can to set the different frequency's beams of a raster curtain around the person in the "single person checkroom," and detector means for detecting whether the raster curtain has been breached .

7. (Amended) [ejector Airliner] An airliner hijacking prevention system [solution program] as claimed in claim 1, [wherein said the "electronic monitoring device" can be connected to the] further comprising narcotic [guns] sprayer installed at [the cross-shaped] a passages of the [four entrances of the plane.] aircraft, the narcotic sprayer being responsive to the at least one monitoring device.

8. (Amended) [Airliner] An airliner hijacking prevention system [solution program] as claimed in claim 1, wherein [said the system transfers] the airliner additionally has a cabin, wherein messages between the airliner and the ground-based monitoring center are transferred through a relay satellite or special frequency band, and [continuously monitors the cabin through the] further comprising a concealed electronic monitoring device for permitting the ground-based monitoring center to monitor the cabin and passenger cabin.

9. (Amended) [Airliner] An airliner hijacking prevention system [solution program] as claimed in claim 1, [wherein said] further comprising a remote-control [of the] plane [by] for use when the ground-based monitoring center is unable to control the airliner normally due to poor communication, in which case the[standby] remote-control plane takes off and controls the airliner. [facilities.]

MARKED-UP SPECIFICATION

SYSTEM FOR PREVENTION OF [THE NEWEST DEVICE FOR PRECAUTION] SKYJACKING

BACKGROUND OF THE INVENTION

Field of the Invention

The present invention relates to a new [newest] device and system for [precaution] thwarting skyjacking [and system].

Description of the prior art

The suicide terrorist attacks on the World Trade Center and Pentagon with huge civil airliners [astonish] astonished and [infuriate] infuriated the world. "Are we safe?" is a question raised by the people of Hong Kong as well as the USA, whose enormous economic loss is shadowed by inner grief.

Sorrow and anger are condensed into the words "Punish the terrorists!" [.]"Prevent hijacking!" is a paramount task of governments in the future! Sorrow and anger inspire the American people to tide over difficulties with the government! Although airports have resumed service, stricter [check makes] check-in procedures make people even more anxiety-ridden. "Are we safe?" is a persistent question. The Empire State Building, overwhelmingly magnificent and believed to be the tallest in New York now, is likely to be deserted by salary earners. Skyscrapers are now, expectedly and painfully, choking the life of the economy.[.]

At the US stock exchange, [is to open on Monday,] the shares of the insurance companies involved [will fall] fell into disfavor. [Skyscraper] It is expected that skyscraper syndrome will also entangle real estate shares.[.] Arrows shot from the dark are beyond our capability to escape from. Who is dominating the world now? The current terrorists crisis tests the intelligence of US leaders, not America's military power. It is [but] a common [imagination] goal, not just President Bush's [insight] desire, to spot the harbor of terrorists and get even with them. Airports are now under stricter control, but is there anybody who can guarantee our safety and reassure us? How can anxiety-

ridden people push the economy forward? US President Bush has a bucket of sticky problems to tackle!

How the New York Stock Exchange [will behave when it resumes operation can] behaved is a measure of the extent to which the world [is] has been affected by the [century] disaster of the century. What is essential is how to convince people that such a disaster will not occur again[?]. People expect President Bush to come out to assure them [before the Stock Exchange resumes operation].

["We have found a plan to prevent hijacking. We will issue, discuss and carry out the plan!] The strict and unpleasant [check] check-in procedures at airports [is] are expected to ease after [the plan is] plans for preventing hijacking are implemented. The pain is temporary because [we are] the civilized world is powerful in our production and technological capabilities. The disaster will never happen again! The people of the United States and around the world will no longer live in the shadow of terrorism! May the victims of the disaster rest in peace. We'll let terrorists know that human civilization is not to be trespassed upon!["]

The world is waiting. And [we] it is strongly [believe] believed that [the above four] effective plans [are effective in] for preventing hijacking by improving the structure of the airplanes and setting up corresponding procedures can be devised. It is reported that people working in the Empire State Building feel quite upset because of their being "outstanding". Acrophobia is spreading! Without plans to end hijacking, the shares of airlines, insurance, real estate and tourism will fall into disfavor. Fear will lead to economic turbulence and downturn. We expect President Bush to come out with strong measures and assure people that all evils will be conquered!

The unprecedented disaster heralds the beginning of [the] a life-and-death struggle between the evil and the civilized community. With a sense of mission, the inventor faxed [the] a creative hijacking prevention device and system proposal, as well as the above [background materials] considerations, to Mr. Liu of the USA Embassy in Hong Kong on September 19, 2001, who forwarded them to the [white house] White House and President Bush.

At four o'clock on September 26, 2001, Mr. Liu told the inventor over the phone: "I would like to thank you on behalf of the government of the USA..." On September 27,

2001, President Bush aired three safety measures for civil aviation. It is anticipated that Mr. Bush will [expectedly] take resolute actions to implement these measures and launch a campaign to conquer the evil! [In the above Proposal to President Bush on Four Hijacking Prevention Solutions, solutions II and III are combined into one.] It is gratifying to note that President [Bush made some revisions and came up with the] Bush's three safety measures for civil aviation are similar to ones that were proposed by the inventor.

On October 22, 2001, the Patent Bureau of China finished an international patent inspection report concerning [the] an application for [the] a patent [of] on "Measures on the Prevention of Hijacking of Civil Airliners". This report lists six [successful cases and] references for gauging the originality that a [patent] patentable technique should have. It is these six [cases] references that set off not only the originality of this patent application, but also its flawlessness!

The reference numbers of the six [cases] references in the Inspection Report are listed below:

	Relativity [y]	Country	Reference No.	Requests for rights	International patent No.
1	1	CN	A,85100918, B64CA/14	1-3	B64
2	Y	CN	A,1126686, B64D25/00	1-2	B64
3	Y	CN	A,1038434, B64D25/00	1-2	B64
4	Y	US	A,3704845, B64C1/10	1-2	B64
5	Y	JP	A,9-036791, H04B7/15	3	B64
6	Y	JP	A,9-020297, B64D47/00	3	B64

1. Patent No. CN85100918a

Patent owner: Mr. Yi Ming and Mr. Shen Xinhua of Mashan Surveying and Mapping Team, Jinxian County, Jiangxi Province.

Patent name: Airliners with Anti-Hijacking Function Dec. 20, 1985

[What is claimed is:]

The following three major technical features of this invention are [to be patented.]:

1. Walls and doors with new functions: using new materials to make the walls and doors capable of sustaining heavy impacts and gunfire.

2. Two different types of "[Safety] safety cockpit" designed to prevent hijackers from entering the cockpit, thus ensuring normal flight of the airliner.

3. [Alarm] An alarm device designed to keep people informed whether safety door of the cockpit is open or closed.

The first technical feature is designed in light of the following:

(1) Using bulletproof high-performance materials to make isolating boards.

(2) Double-bar-shaped, spear-shaped and blade-shaped screws designed to fix the isolating boards and prevent hijacking.

(3) [External] An external framework with "metal blades" designed to fix the isolating boards and prevent hijacking. Aluminum alloy materials are shaped like knives or saw-teeth, giving the "metal blades" extra power.

The second technical feature is designed in light of the following

(1) Safety isolating walls with no doors and permanent safety cockpit.

(2) A transit [Transit] room and impermanent safety cockpit.

(3) Transit room temperature including how to enter the cabin from the cockpit and vice versa.

The third technical feature is designed in light of the following:

(1) An alarm [Alarm] device used to keep the crew informed whether the doors of the cockpit and cabin are open or closed. The alarm device may consist of an indicator, flashlight and buzzer.

(2) Spring switches designed to connect or disconnect some circuits according as whether the safety bolts are plugged or unplugged.

(3) Synchronized switches designed to make the alarm device automatically operate when the airliner is started.

2. Patent CN 1126686A

Patent owner: Mr. Wang Honghua, Shangyuetang Construction Section, Zhuzhou City, Hunan Province, 412000

Patent name: Airliner Anti-Hijacking System, January 12, 1995

[What is claimed is:]

The application of Mr. Wang Honghua is basically the same as No. 88103336.7 patent CN 1038434A of Mr. Zhang Hua and Mr. Zhou Guangyuan of Beijing. This invention adopts an automatic monitor to transfer messages, but it is installed only in the airliner. The inventor treats the airliner full of passengers as [the] a battlefront.

1. The inventor [designs] proposes to install the alarm device in the cockpit, but fails to explain how the alarm device identifies hijackers.
2. He points out that a "digit-key alarm device" is now available in China, explains how the alarm device can exactly count the hijackers, how may cameras are needed to cover every corner of the airliner, how to identify overlapped images, and how to spot disguised hijackers. The 0-9 keys are intended to notify the control (operation) room [to press] by pressing 6 or 7 when 6 [0] or 7 hijackers are counted. Then what about 11 hijackers? The story is not convincing first because of the irrational design of the alarm device!
3. The inventor [designs] proposes to equip the plane with auto-aim guns that are synchronous with the small video cameras, transferring messages to the control room. His [patent] invention does not ensure the safety of the hostages. [Auto-aim] The auto-aim technique is rather [complicate] complicated. The "anti-hijacking" function claimed by the inventor will fail if the hijackers hold just one hostage or makes a smoke screen.

3. Application 88103336.7 CN 1126686A

Patent owner: Mr. Zhang Hua

Address: No. 8, Bldg. 2, behind Yong An Dong Li Primary School, Jian Guo Men Wai, Chaoyang District.

Patent name: Anti-Hijacking Device Installed on the Aircraft

January 3, 1990

[What is claimed is:]

A TV monitor, striker, gun barrel and gun head on the operation desk designed by the Beijing inventor can't prevent hijacking. They are just mechanical or shooting devices, which can do nothing when terrorists hold any hostage. Patent

88103336.7 CN 1126686A is by no means the same as [Mr. Zhen-man Lin] the present inventor's hijacking-prevention solution.

4. Application US A,3704845, B64C 1/10

Patent owner: Michael Ord, 5267 Wilkins Avenue, Pittsburgh, Pa.

Dec. 5, 1972

Patent name: AIRPLANE HIJACKING PREVENTION SYSTEM

[Abstract of disclosure:]

A method and system for preventing airplane hijacking features the following:

1. The cockpit is isolated from the cabin to give passengers a sense of safety, but communication must be ensured. The buttons fixed in the cabin keep the cockpit informed of such things as oxygen shortage, fire alarm, medical accident, device fault and any other trouble.
2. The isolating door between the cockpit and the cabin is restricted, and the door and its associated isolating walls are made of bulletproof materials.
3. The voice communication system of the audio system is a one-way system from the cockpit to the cabin, preventing the words of the hijackers from being heard.
4. This invention warns the passengers in advance.

The key idea of the patent is that the pilots are locked in the cockpit so that the hijackers cannot communicate with the pilots. Even if the hijackers hold any hostage, the pilots will not open the cockpit without hearing anything. Even if the hijackers hold any hostage, the pilots will not open the cockpit without hearing anything. Even if the hijackers do as indicated in Fig. 4 [22] of the reference, the pilots may choose to stay if the situation is not critical.

5. Application JP,A,9-036791, H04B7/15

(19) Franchise Office of Japan (JP) Issued on Feb. 2, 1997

Inventor: Decheng Changzhi

Address: No. 1 Bldg. 1 Dingmu 2, Xiaogu, Hanchuanding, Gaozuo Shire, Kangawa

Patent name: A Support Device Using Satellite Communication to Prevent Hijacking

The inventor designed the support device using satellite communications to prevent hijacking. The device keeps [the] a ground monitoring center informed of hat is going on in a hijacked airliner by means of satellite communication.

[Solution:]

In case of hijacking, the passengers or aircrew press [the] emergency buttons fixed at various places in the airliner, [the] and a video camera with long or short lens installed at an appropriate place begins to work, digitizes the information by means of an image processing device or turns the information into FX (facsimile) file format, and then sends the information to the ground monitoring center via the satellite. The ground monitoring center in turn sends information via the satellite to the camera so that the camera adjusts the foci and angles of the long and short lens. In addition, dialogs may help to solve hijacking.

What [is claimed] the reference proposes is:

1. Fix several cameras at places with a good field of vision and install a monitor in the cockpit to monitor the cabin, and receive information from the communication satellite and transfer it to the ground monitoring center through the support device.
2. Record the information of the satellite for the use of the emergency communication device. Use the image processing device to digitize the information or turn the information into FX (facsimile) file format and then send it to the ground monitoring center.
3. Fix emergency buttons in the cockpit and the cabin, which serve to start the support device so that the ground monitoring center can monitor what is going on.

6. Application JP,A,9-020297, B64D47/00

(19) Franchise Office of Japan (JP) Issued on January 21, 1997

Inventor: Youdong Gongqi

Address: No. 1, Zhizituju 1467, Zuoboding, Zhedao

Patent: Support Device for Hijacking Prevention

Application JP,A,9-020297, B64D47/00 is exactly the same as JP,A,9-036791, H04B7/15. It is strange that both of them should be approved. Both use satellite

communication to achieve the same purpose. Both are different from the hijacking prevention system. [Item 3 of Mr. Zhen-man Lin] One item of the present inventor's hijacking prevention system solution features a detailed and original arrangement for remote control of the airliner. Therefore, we can easily come to the conclusion that application JP,A,9-020297, B64D47/00, just like JP,A,9-036791, H04B7/15, [cannot prevent the generation of Mr. Zhen-man Lin] would not have led to the present inventor's prevention system solution.

SUMMARY OF THE INVENTION

The disadvantages of prior art are overcome by the present invention[, following is their disadvantages and solutions from the present invention:]. The following are their disadvantages and the solutions provided by the present invention:

[the] The features of CN 85100918A include the following:

1. Shockproof isolating walls with or without doors, featuring bulletproof materials (unidentified yet) and heterogeneous screws fixing isolating boards.

   Comments: Over one hundred years' development of aircraft leads to different performance concepts of isolating-wall technique and bulletproof performance. This patent technique is open to all aircraft manufacturers.

2. Permanent doorless design or entering impermanent safety cockpit through the "transit [room".] room."

   Comments: [Application] The application for patent does not depend on the failure or success of a permanent doorless design. The safety conditions of the "transit room" are monitored through a peephole. The right of passage through the "transit room" is subject to the perception of the aircrew, which is a time-honored concept! What is strange is that the most recent application for patent was made in 1985, but there weren't the sophisticated automatic detection tools already available in the 1970s, so that patent CN

85100918A lacks the originality essential to any patent! The inventor has further modified the design from double-wall double-door to double-wall three-door (Figure 9). Short of automatic detection tools, however, more doors are of no avail! A knife is enough for the terrorists to force the aircrew to take them through the "transit room" to the cockpit! Therefore, no one has used patent CN 85100918A. The inventor is fully aware of that and so identifies his invention as an impermanent design.

3. The third patent feature of CN 85100918A is the alarm device designed to keep people informed whether the safety door of the cockpit is open or closed.

Comments: Page 7 is highlighted by the patent staff: (1) The alarm device consists only of an indicator, flashlight and buzzer. It serves to notify whether the doors are properly closed. But the then-popular infrared sensor is not used, so how could such an alarm device be sophisticated? (2) The safety lock is even or outdated. It is intended to lock the door of the cockpit, with the key to be kept by the captain. What the terrorists need to do is steal the key (without needing to kill the captain) and enter the cockpit. (3) The shield of the peeping device is intended to prevent terrorists, who may look into the cockpit through the peephole, from shooting at pilots. If the terrorists are determined to shoot, chain switches may serve the same purpose. In addition, convex lens, widely used in stores and shops, may better serve the purpose. Therefore, using a shield is like carrying coals to Newcastle!

Patent CN 85100918A is defective. The 19th-century technology was not to blame for its inability to prevent hijacking. The scarcity of practical anti-hijacking

techniques sets off the originality of this patent technique. For example, image identifier, identification through sound spectrum, and use of five-finger mold instead of that of a single finger. The application of this patent system solution will help eradicate "hijacking"!

Patent CN1126686A may be virtual, but it does not befit a civilized society to turn an airliner into a battlefield. Unlike patent CN 1126686A, which features ["anti-hijacking",] anti-hijacking," [Mr.. Zhen-man Lin patent] the present inventor focuses on the prevention of hijacking, and therefore his patent application is justifiable.

Patent 88103336.7 CN 1126686A is by no means the same as [Mr. Zhen-man Lin] the present inventor's hijacking-prevention solution. Having been widely used, a TV monitor is [not a patent] but an auxiliary [method] feature. It is not the key to [Mr. Zhen-man Lin patent] the present inventor's solution to hijacking prevention. It does not befit a civilized community to ignore the safety of passengers and turn an airliner into a battlefield. Therefore, [Mr. Zhen-man Lin] the present inventor believes that application 8810336.7 is not truly valid.

Drawbacks of patent US A,3704845, B64C 1/10

1. The US patent invention does not allow for any possible neglect of the pilots.
2. The pilots may not come even if all buttons in Fig. 4 [22] of the reference are pressed.
3. Are the bulletproof wall and door of the cockpit soundproof? The hijackers know perfectly well how to raise hell, and they [will] may kill one person every five minutes until the pilots come out!

[5] 4. The pilots may rely on their unreliable perception and reasoning to decide whether to open the door of the cockpit[,]; therefore the US patent invention is inadequate to deter hijacking.

The US patent invention in 1972 has drawn upon the experience of the previous three patents of China but still leaves much to be desired. By contrast, the double-door structure [specified in Mr. Zhen-man Lin patent] proposed by the present inventor is original, the "[Single] single-person checkroom" is a natural evolution of modern technology, and the five-finger mold is unprecedented. The single-person checkroom of the double-door structure precludes the effect of human factors and the five-finger mold makes the system flawless. [The hijacking prevention system of Mr. Zhen-man Lin is so original that the US patent application does not affect the patent application of Mr. Zhen-man Lin.]

[As the name implies,] The present invention [is] can also serve as a support device to prevent hijacking through satellite communication! [The idea is good enough but not specific yet.] Its merit is that the support device can be used for negotiation and monitoring!

It is recommended, in [Item 3 of Mr. Zhen-man Lin] one item of the present inventor's hijacking prevention system solution that, apart from using satellite communication for negotiation and monitoring, manual piloting should be disabled while automatic piloting is enabled until the airliner touches down, thus deterring hijacking. There lies [the originality] a primary feature of the invention! Satellite communication is not the patent right of application JP,A,9-036791,H04B7/15, but instead the right of the owner and inventor of the satellite! What makes the difference is how to use satellite communication to achieve different purposes. [Item 3 of Mr. Zhen-man Lin] The present inventor's hijacking prevention system solution features a detailed and original arrangement for remote control of the airliner. Therefore we can easily come to the conclusion that application JP,A,9-036791,H04B7/15 [cannot prevent] would not have led to the generation of [Mr. Zhen-man Lin] the present inventor's hijacking prevention system solution.

Application JP,A,9-020297,B64D47/00 is exactly the same as JP,A,9-036791,H04B7/15. It is strange that both of them should be approved. Both use satellite

communication to achieve the same purpose. Both are different from the present inventor's hijacking prevention system, which [Item 3 of Mr. Zhen-man Lin hijacking prevention system solution] features a detailed and original arrangement for remote control of the airliner. Therefore we can easily come to the conclusion that application JP,A,9-020297,B64D47/00, just like JP,A,9-036791,H04B7/15, [cannot prevent] would not have led to the generation of [Mr. Zhen-man Lin] the present inventor's hijacking prevention system solution.

[Obviously, the present invention provides not solutions of problems of prior art, but newest and most safe device for precaution skyjacking and system!]

BRIEF DESCRIPTION OF THE DRAWINGS

Fig. 1 is a [graph] drawing that shows the hijacking prevention system and device.

Fig. 2 is a flow chart of the airliner hijacking prevention system.

Fig. 3 is a program block diagram of a single person checkroom security system.

Fig. 4 is a [graph] drawing that represents the construction of a series of security checking system.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

A. Improvement of Airplane Structure and Establishment of Corresponding System Program:

1. As shown in [FIG.1-1] Fig. 1, [install "Single] at reference number 1, a "single person checkroom" path structure is installed to make it impossible for terrorists to enter the cabin. [The structure of checkroom must in order to precaution against that to bump and to pick out of..]
2. [As shown in FIG.2] With reference to Fig. 2 of the systematic program, [install] an independent concealed electronic monitoring device is installed. It is not controllable by but is visible to the aircrew. [Special] A special waveband transfer enables a ground-based monitoring center to have full control of terrorists and negotiate with them easily.

3. [As shown in FIG.1-3] With reference to Fig. 1, at the four passages of the [entrances] entrance 3 of the airliner, [install] remote-controlled chemical spraying guns and appropriate obstacles are installed to control or restrict the activities of terrorists. A narcotic sprayer may also be installed.

4. [As shown in FIG.2] With reference to Fig. 2, nothing is worse than when the pilot takes a hand in hijacking, but in this case a "flight [orbit] Trajectory Calibrator," or flight path specifying unit, can be used to lock the flight course, under the remote control of the ground-based monitoring center. In Fig. 2, notations such as "Fig. 1-5" indicate reference number 5 in Fig. 1.

5. [As shown in FIG.2] With reference again to Fig. 2, the ground-based monitoring center has special plane with a monitoring device, ready to fly and trace. Or satellite relay stations may transfer monitoring messages.

6. Set flight discipline for the aircrew.

B. [FIG.3 is shown, applications of] Fig. 3 shows the Facilities and Features of the System Program:

(1) [Add passage] Passage checkroom structure and system setting:

.a [FIG.1-a & b. are shown, install]Two unidirectionally transparent bullet-proof glass doors are hiden as shown in Fig.1 a & b. When closed , the doors push out from the dotled line of Fig.1 f, Fig1.r. shown the check place which is enclose by closing two the doors. from the cabin to the passage as a second door, so that the pilot can see the passage unidirectionally, making hijackers conscious of someone looking at them in the dark.

b. Fig.4 f are [As] shown [in Fig.4 a & b, the back and from panels] install hiden in a and b of the bullet-proof glass door are both unidirectionally transparent, when they push on and closed, with a 0.8-1 meter single person checkroom in between[,]. Fig. 4 [c. is shown] also shows a detector c of a raster curtain,[;] FIG.4 d. is shown], a detector d for identifying weight[;], [FIG.4 e. is shown] [and] a

detector [of] e for a password card[;], [FIG.4 h is shown] a detector h of [Five-finger] a five-finger mold test[;], and a [FIG.4 i.] detector [of Image test] i for an image test. [FIG.4 j. is shown a] Fig. 4 also shows a detector j of human body infrared[;], [FIG.4 k. is shown] a laucher k of special beams for the raster curtain, and a [FIG.4 l. is shown] detector [of] l for voice recognition[; they will be]. These detectors automatically identifying weight, a password card, [fingerprint] fingerprints, and an image, and provide a voice test. Although FIGS.1 and 4 show elements c, d, h, i, k, and L at positions offset from the "single person checkroom" that is provided between and enclose by closed two the doors.

c. As shown in [FIG.2] Fig. 2, the front and back panels are closed under the double control of closing instructions of an airplane in flight status and the ground-based monitoring center, meanwhile turning on the automatic identifier.

d. As [FIG.2 is shown] Fig. 2 shows, the aircrew must get permission via communication and a password card instruction to open the first door and enter the checkroom, and the automatic identifier, after sensing only one person in the checkroom, closes the first door and begins to check.

e. As shown in [FIG.3] Fig. 3, after the automatic identifier checks that only a single person [only] is present and makes ID identification, the cabin, on being notified of the ID of the approaching person, decides whether to open the second door. The first door will not open until the second door closes, thus preventing hijackers from swarming in.

f. Persons in the cabin will be documented by the captain and the monitoring center respectively when the automatic identifier is started. There must be at least one engineer in the cabin; otherwise no person can pass the checkroom, except in non-flight status of the plane or by obtaining instruction from the monitoring center.

g. If any person in the cabin wants to leave the cabin during flight, a simple password card can be used to open the second door and enter the checkroom, and the automatic identifier in the checkroom instructs [to close] the second door to close and begins to check. The first door can be opened only after the check.

h. The automatic identifier sets the number of persons in the cabin and decides that at least one engineer must stay in the cabin during flight.

i. Problems and solutions:

1. The automatic identifier restricts the number of persons in the checkroom, making it impossible for hijackers to enter the checkroom together with the aircrew. A hijacker may only enter under disguise, but the automatic identifier may have identification combinations, such as the weight, fingerprint and palm print and voice. The unidirectionally transparent glass door fully exposes hijackers, but it is necessary to equip a back-view mirror for the engineer or formulate a review system to increase the weight of manual check.

2. Why use the five-finger mold? Because a single finger may be cut, but if the whole hand is cut, it will be impractical and unnecessary to use modern technology to make a frozen cut hand resume its original appearance in the short time and limited space. This makes the system flawless.

3. Even if the engineer and aircrew are hijackers, who can freely pass the [Single] single person checkroom, they are restricted by [2.(3) Lock] a locked flight course by means of the flight trajectory [locus] calibrator.

(2) Independent concealed electronic monitoring device:

The historic disaster of the World Trade Center shows how defective the designs of airplanes are: the hijacking shut down all communications

facilities so that their identities [remain] remained a mystery. The black box cannot provide real-time on-site video and audio recordings, making it almost impossible to find and punish those behind the terrorist acts.

[As shown in FIG.1-4, the airplanes] Airplanes are not equipped with independent concealed video and audio electronic monitoring equipment and real-time transfer and storage equipment, which (if any) cannot be controlled by the aircrew. This is ridiculous today, when technology is so sophisticated and the space is studded with satellites. No doubt, the US aviation security bureau cannot pass the buck.

Therefore, it is imperative that an independent concealed electronic monitoring device 4 should become a standard device of an airliner. Some people my claim that their privacy is encroached upon, but the monitoring on the channel is within the permitted range. And so the independent concealed electronic monitoring device may somewhat deter potential hijackers.

(3) [Lock] A locked flight course by means of flight [locus] Trajectory Calibrator:

a. As shown in [FIG.2] Fig. 2, in case the flight [orbit] trajectory deviates from the preset course, the calibrator [(FIG.1-6)] 6 (see Fig. 1) will surely use the alarm functions of [channel feedback center of] the electronic monitoring device.

b. With the flight [orbit] Trajectory Calibrator 6, the ground-based monitoring center may switch manual steering over to remote-controlled automatic/semiautomatic steering (not beyond the present technology) when the engineer loses his right to act. A remote-control plane may be provided so that it can take off and take control of the airliner in the event the signal from the monitoring center lacks sufficient coverage.

how ?
new matter ?

c. It is advisable to draw upon the high-air remote control technology of air scouts. The security of a hijacked plane may somewhat be affected by geographical and atmospheric conditions, but "remote

control" can bring the hijacked plane to "an automatic flight status" and thus absolutely prevent the plane from suicide attack on downtown areas or landmark buildings. For example, the plane can be made to safely rise and fly away from the downtown area and enter into "remote-controlled steering status", thus winning time for the plane to enter the preset course. Decades of successful applications of automatic pilot technology have made us fully convinced of its security.

d. Confidentiality of remote control information is no problem in today's digitized age.

(4) The ground-based monitoring center [has] should have a special plane with a monitoring device, ready to fly and trace. The ground-based special remote-controlled plane prevents an accident plane from flying out of the direction radius.

(5) Set flight discipline for the aircrew:

a. It is necessary to strictly comply with the discipline set by the structure and program of the channel calibration room so as to preclude any hijacking.

b. Make the engineer more capable of tackling emergencies, mainly with portable non-fatal chemical weapons.

From the description above, [shows] the excellence and [characters] characteristics of the present invention will be apparent:

1. The Measure Plan of this patent application centers on structural techniques;

2. Various combinations of available classifiable techniques are used in the Measure Plan;

3. The Measure Plan is quite comprehensible. Except the remote-controlled transmissions, which are encrypted, all the rest is open to the public, thus serving as an effective deterrent to hijackers;

4. Even though the above Measure Plan leaves much to be certified and improved, it comes right to the point if considered from the perspective of the global economy; and

5. It is likely for the Americans to accept the plan, because they have their own thoughts and judgments! They will regain confidence in safety and overcome their fears incurred by the disastrous attacks. The global economical order is soon to return to normal!

The use and networking of " flight[locus monitors] Trajectory Calibrator" of the monitoring centers at airports the world over promise enormous business opportunities. Uprooting hijacking, striking terrorism worldwide and defeating the evil by enlightened means manifest the intelligence of the civilized human community.

The present invention has been described with reference to a preferred embodiment thereof and it is understood that [there] this is not a restriction to [the type of] the present invention, and that many changes and modifications in the described embodiment can be carried out without departing from the scope of the invention, which is intended to be limited only by the appended claims.

ABSTRACT OF THE DISCLOSURE

[This] An airliner hijacking prevention system has [solution is the most sophisticated solution available today. The solution consists of the following] three complementary [, indispensable parts: 1. The] aspects. One of these aspects is that a double-door "single person checkroom"[,] provides the only passage to the cockpit. In this closed one-person-only checkroom, a series of checks are made before access is gained to the cockpit. [2. Closed] Another aspect is that a closed circuit television and communication system[,] is used. It is hidden, free from the control of the aircrew, and provided with an independent power supply. This system [keeps informed of] provides information about what is going on in the cockpit and cabin. The third aspect is the use of a [3. A] hidden flight [locus monitor] trajectory Calibrator, also free from the control of the aircrew and provided with independent power supply [also]. It transfers messages between the airliner and the ground monitoring center through a relay satellite or special frequency band. The ground monitoring center must comply with state laws and a transnational overall management and monitoring center must be established to bring any off-course airliner into automatic flight through the Trajectory Calibrator or bring back the airliner to the airport through remote control.